

Listing of Claims

1. (Original) A universal protein array, comprising:
a plurality of substantially pure target polypeptide samples provided on a solid support; and
wherein the samples are immobilized on the solid support in an addressable pattern.
2. (Original) The array of claim 1, wherein the target polypeptide samples maintain a substantially native protein configuration.
3. (Original) The array of claim 1, wherein the target polypeptide samples comprise substantially full-length native proteins.
4. (Original) The array of claim 1, wherein each address contains only one substantially pure target polypeptide.
5. (Original) The array of claim 1, wherein the addresses are arranged in rows and columns.
6. (Original) The array of claim 1, wherein the array is arranged in a computer readable format.

7. (Amended) The array of claim 1, wherein the array comprises ~~comprising~~ at least 10 different polypeptide samples.

8. (Amended) The array of claim 1, wherein the array comprises ~~comprising~~ at least 30 different polypeptide samples.

9. (Amended) The array of claim 1, wherein the array comprises ~~comprising~~ at least 100 different polypeptide samples.

10. (Original) The array of claim 1, wherein the array comprises a microarray.

11. (Original) The array of claim 1, wherein the solid support comprises glass, nitrocellulose, polyvinylidene fluoride, nylon, fiber, or combinations thereof.

12. (Original) The array of claim 1, wherein the polypeptide samples comprise transcriptional factors, transcriptional activators, or transcriptional coactivators.

13. (Original) The array of claim 12, wherein the polypeptide samples comprise TFIIA, TFIIB, TBP, f:TFIID, TFII3; TFIIF, f:TFIIH, Pol II, RXR, TR, Oct 1, Sp1, G4-94, G4-147, G4AH, G4VP16, G4-CTF, G4-Sp1, G4-E1A, G4-IE, G4-Tat, PC4-P, PC4-N, PC4-C, PC4-ΔS, PC4-m1, PC4-m2, PC4-m3, PC4-m4, PC4-m5, PC4-m6, PC4-m7, PC4-wt, p52, p75, p75-C, p300-C, PCAF, PCAF-C, TAF250, Topo I(wt), Topo I(mt), Topo I(wt)*, Topo I(nati), ASF, SR, GST-Nu, or GST-K.

45. (Original)The array of claim 1, wherein the plurality of substantially pure target polypeptides are a collection of related proteins and wherein the collection is selected from the group consisting of:

all or substantially all proteins encoded for by the genome of an organism;

all or substantially all proteins encoded for by a chromosome of an organism;

proteins expressed in a cell during a particular growth phase or environmental condition;

proteins expressed in a cell under a particular abnormal state; proteins expressed in cells at various times during the progression of a disease or condition; proteins expressed in a particular cell type; proteins from a particular protein family; proteins that show sequence homology to each other; proteins that share secondary structural characteristics; proteins that associate to form multimeric complexes;

viral epitopes;

complete or substantially complete domains of proteins; and

proteins from different species.